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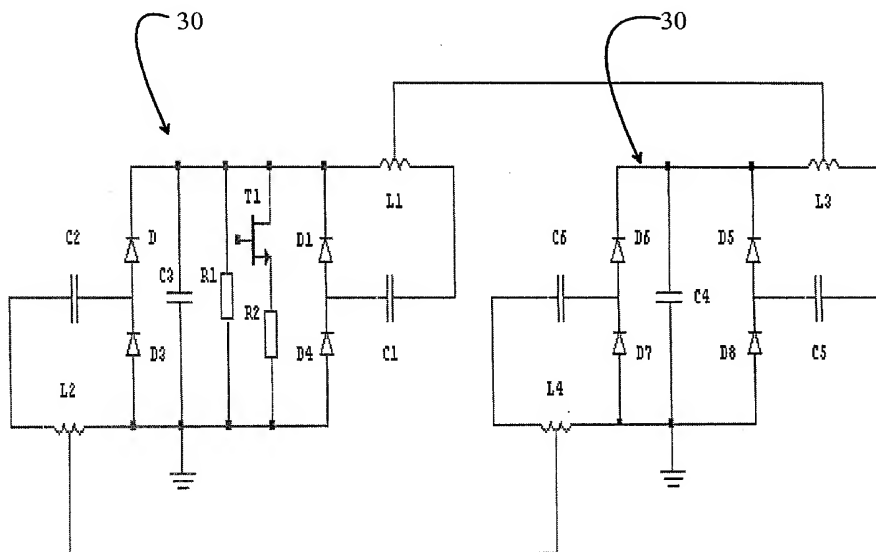
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| <p>(51) <b>International Patent Classification<sup>7</sup>:</b>      <b>B60C 23/04 //</b><br/>H02J 17/00</p> <p>(21) <b>International Application Number:</b><br/>PCT/FI2004/000777</p> <p>(22) <b>International Filing Date:</b><br/>17 December 2004 (17.12.2004)</p> <p>(25) <b>Filing Language:</b> English</p> <p>(26) <b>Publication Language:</b> English</p> <p>(30) <b>Priority Data:</b><br/>20031875      19 December 2003 (19.12.2003)      FI</p> <p>(71) <b>Applicant (for all designated States except US):</b> <b>VALTION TEKILLINEN TUTKIMUSKESKUS</b> [FI/FI];<br/>Vuorimiehentie 5, FI-02044 VTT (FI).</p> <p>(72) <b>Inventors; and</b></p> <p>(75) <b>Inventors/Applicants (for US only):</b> <b>VARPULA, Timo</b> [FI/FI]; Suovapolku 7 A, FI-01660 Vantaa (FI).<br/><b>JAAKKOLA, Kaarle</b> [FI/FI]; Vänrikki Stoolinkatu 2 A 31, FI-00100 Helsinki (FI).</p> | <p>(74) <b>Agent:</b> <b>SEPPO LAINE OY</b>; Itämerenkatu 3 B, FI-00180 Helsinki (FI).</p> <p>(81) <b>Designated States (unless otherwise indicated, for every kind of national protection available):</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.</p> <p>(84) <b>Designated States (unless otherwise indicated, for every kind of regional protection available):</b> ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published:</b><br/>— with international search report</p> |
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**(54) Title:** COIL SYSTEM AND VOLTAGE RECTIFIERS FOR COMMUNICATION AND INDUCTIVE POWERING OF DEVICES INSIDE ROTATING TYRE OF A VEHICLE



**(57) Abstract:** The present invention relates to a power feeding arrangement for electric loads (R) positioned in tires (20) of vehicles. According to the invention the arrangement comprises at least one feed coil ( $L_f$ ) arranged in the vehicle (10), at least one receiver coil ( $L_r$ ) arranged in the tire (20), and at least one load (R) electrically coupled to the receiver coil ( $L_r$ ).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*